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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,332	06/30/2006	Bisong Cao	58578-8001.US01	8755
Perkins Coie 101 Jefferson Street Menlo Park, CA 94025			EXAMINER LEE, BENNY T	
			ART UNIT 2817	PAPER NUMBER
			MAIL DATE 11/07/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/540,332

Applicant(s)

CAO ET AL.

Examiner

Benny Lee

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5, 11, 16, 22 and 28-36 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 5, 11, 16, 22, 28, 29, 33-35, 36 is/are rejected.
7) ☒ Claim(s) 30-32 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

Claims 5, 11, 16, 22; 33-35; 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, second full paragraph therein, note that “said microconductive microstrip resonator” lacks strict antecedent basis.

In claims 33, 36, second full paragraph therein, note that “said length of the two sides ...” lacks strict antecedent basis, since the plurality of superconductivity resonators has not been strictly defined with “sides”. Moreover, note that it is unclear how “the two sides” relates to the earlier recited “long side” & “short side”. Clarification is needed. Finally, note that reference to “said signal” lacks strict antecedent basis.

The following claims have been found to be objectionable for reasons set forth below:

In claim 5, second full paragraph therein, note that the recitation of “formed by” should be rephrased to avoid the inappropriate method step recitation.

In claim 28, lines 3, 4, note that “are formed” should be rephrased to avoid the inappropriate method step recitation.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 28, 29; 33, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al in view of Dworsky.

Kaneko et al (e.g. Fig. 1) discloses a stripline type filter comprising: plural striplines (2, 3) configured in a U-type configuration such that one side of the U-type stripline is longer than and in parallel with the other side of the U-type stripline. Note that there are input/output lead portions (2a, 3a) disposed with corresponding ones of the U-type striplines (2, 3). As evident from FIG. 1, the U-type striplines (2, 3) are configured to be neighboring as well as being axisymmetric with respect to each other. However, Kaneko et al differs from the claimed invention in that the striplines of the filter are not comprised of a superconductive material.

Dworsky discloses that by forming a filter having high temperature superconductive material and operating such a filter at a superconductive temperature (i.e. 201, such a filter provides the benefit of a resonator whose cross-section is smaller than a corresponding filter operating at a nominal ambient temperature (101). For example, see column 3, lines 28-33 & lines 50-52).

Accordingly, it would have been obvious in view of the references, taken as a whole, to have realized the striplines in the filter of Kaneko et al as a high temperature superconductive material such as taught by Dworsky. Such a modification would have provided the aforementioned advantage of providing a filter of reduced cross-section relative to a corresponding filter operating at a nominal ambient temperature (i.e. filter size is not increase), thereby suggesting the obviousness of such a modification.

Applicant's arguments with respect to claims 1-7, 10-12, 16, 17, 22, 23 have been considered but are moot in view of the new ground(s) of rejection.

Claims 30-32 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number 571 272 1764.

**/BENNY LEE/
PRIMARY EXAMINER
ART UNIT 2817**

B. Lee